the single crystalline film is formed from one of the group of Si, GaN, GaAs, Ga_{1-x}Al_xAs, ZnSe, ZnS, CdTe, ZnS_{1-x}Se_x, and YBCO.

22. The method of claim 18, wherein:

the single crystalline substrate is formed from one of the group of Si, GaAs, ZnSe, SrTiO3, and sapphire; and

the single crystalline film is formed from one of the group of Si, GaAs, Ga_{1-x}Al_xAs, ZnSe, ZnS, CdTe, ZnS_{1-x}Se_x, and YBCO.

23. The method of claim 18 wherein:

the single crystalline substrate is formed from one of the group of Si, GaAs, ZnSe, and SrTiO3; and

the single crystalline film is formed from one of the group of Si, GaN, GaAs, Ga_{1-x}Al_xAs, ZnSe, ZnS, CdTe, ZnS_{1-x}Se_x, and YBCO.--